

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Glenna G. Mayo, et al.

Examiner: S. R. Pannala

Serial No.: 10/811,259

Group Art Unit: 2164

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Docket No.: 200310943-1

Title: Access Point that Monitors Guest Usage

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is filed in response to the Final Office Action mailed March 15, 2007 and Notice of Appeal mailed June 18, 2007.

AUTHORIZATION TO DEBIT ACCOUNT

It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's deposit account no. 08-2025.

I. REAL PARTY IN INTEREST

The real party in interest is Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 20555 S.H. 249 Houston, TX 77070, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences known to appellant, the appellant's legal representative, or assignee that will directly affect or be directly affected by or have a bearing on the Appeal Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1 – 29 stand finally rejected. The rejection of claims 1 – 29 is appealed.

IV. STATUS OF AMENDMENTS

No amendments were made after receipt of the Final Office Action. All amendments have been entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The following provides a concise explanation of the subject matter defined in each of the claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element or that these are the sole sources in the specification supporting the claim features.

The section entitled “Brief Summary” provides a summary in the following two paragraphs:

An access point includes an interface that permits one or more guests to obtain Internet access. The access point includes monitoring logic that determines the usage of each guest. The guest usage is used to locally cache information that may be of interest to guests of the access point (see specification at paragraph [0005]).

According to another embodiment, a method of providing guests with Internet service comprises detecting a request for Internet access from a guest and monitoring usage patterns of that guest. The method further includes predicting information that may be of interest to the guest based on the guest’s usage patterns, and caching the information of interest in a local memory (see specification at paragraph [0006]).

Claim 1

An access point (FIG. 1, #100), comprising:
a web server interface (FIG. 1, #150) that couples one or more guests (FIG. 1, #75) to the Internet (paragraphs [0022] – [0024]);
a usage collector application (FIG. 1, #120) that monitors usage of all of said guests (paragraphs [0029] – [0031]); and
web cache software (FIG. 1, #110) that caches web pages that are of interest to one or more guests in a local memory (FIG. 1, #160) of the access point (paragraphs [0032] – [0034]), wherein the access point is a single device that links the one or more guests to the Internet (paragraphs [0013], [0016], [0017], [0019], [0021]).

Claim 12

A method of providing guests with Internet service (paragraph [0006]), comprising:
detecting at an access point (FIG. 1, #100) a request for Internet access from a guest (FIG. 1, #75: paragraphs [0016] – [0017]);
monitoring at the access point (FIG. 1, #120) usage patterns of the guest (paragraphs [0029] – [0031]);

predicting information that is of interest for the guest based on the guest's usage patterns (paragraphs [0032] – [0034]); and

locally caching (FIG. 1, #110/160) in the access point the information that is of interest to the guest, prior to the time that the guest requests the information (paragraphs [0032] – [0034]), the access point being a single device that links the guest to the Internet (paragraphs [0013], [0016], [0017], [0019], [0021]).

Claim 17

A system for remotely managing a plurality of Internet access points (FIG. 2, #100a-100g), comprising:

a plurality of access points (FIG. 2, #100a-100g) that provide Internet access for one or more guests (FIG. 1, #75: paragraphs [0022] – [0024]), each of said access points being a single device (paragraphs [0013], [0016], [0017], [0019], [0021]) and including a web server interface (FIG. 1, #150) and a usage collector application (FIG. 1, #120), with the usage collector application detecting information relating to guest usage (paragraphs [0029] – [0031]);

a remote management (FIG. 1, #200; FIG. 2, #200) server that couples to said plurality of access points via the Internet, said remote server including a remote monitor (FIGS. 1 and 2, #250) and a database (FIGS. 1 and 2, #225: paragraphs [0034], [0035], [0038] – [0044]);

wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern (paragraphs [0038] – [0044]).

Claim 25

An access point (FIG. 1, #100) that permits multiple guests to obtain Internet access, comprising:

means (FIG. 1, #150) in said access point for interfacing said access point with the multiple guests (FIG. 1, #75: paragraphs [0022] – [0024]);

means (FIG. 1, #150) in said access point for coupling the access point to the Internet (paragraphs [0015] – [0017]);

means (FIG. 1, #120) in said access point for monitoring requests made by a guest to collect information on a guest's usage (paragraphs [0029] – [0031]);

means (FIG. 1, #110) for selecting content that is of interest to the guest based on the guest's usage (paragraphs [0032] – [0034]); and

means (FIG. 1, #160) in said access point for locally storing content that is of interest to the user, wherein the access point is a device that links the multiple guests to the Internet (paragraphs [0013], [0016], [0017], [0019] , [0021]).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 12, 17, and 25 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention.

Claims 1-29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2004/025007 (Salo).

VII. ARGUMENT

The rejection of claims 1 – 29 is improper, and Applicants respectfully request reversal of these rejections.

The claims do not stand or fall together. Instead, Applicants present separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-heading as required by 37 C.F.R. § 41.37(c)(1)(vii).

Claim Rejections: 35 USC § 112

Claims 1, 12, 17, and 25 are rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as his invention.

The Examiner argues that claims 1, 12, 17, and 25 are indefinite because these claims recite an access point as a “single” device. Specifically, the Examiner argues as follows: “Merely drawing a block in a figure does not mean it is single device without proper support by the specification” (see final OA at p. 2). These rejections are traversed.

First, the specification explicitly provides a definition for the term access point as follows:

The term “access point”, as used herein, is intended to mean a device that operates as a bridge or hub to link one or more computer systems to a broadband or telephone connector from which Internet access may be obtained. See specification at paragraph [0013].

Notice that the specification defines access point as “a” device. Further, the specification repeatedly refers to “the” access point (see example, paragraphs [0016], [0017], [0019], etc.).

Second, figure 1 shows the access point as a single box #100 having plural components located inside the box. The specification describes the access point as a single appliance (“an” appliance):

According to the exemplary embodiments of Figure 1, the access point 100 appears and operates in a manner similar to an appliance. Stated differently, the access point exhibits a small form-factor, and has relatively few inputs and outputs to simplify its use. Further, the access point 100 may be set up with little user support, other than connecting the access point to an Internet connector 50, and if desired, to a LAN connector, and then turning on (or powering-up) the unit. See specification at paragraph [0019].

Third, the specification discusses the access point as including a variety of hardware and software components located inside the access point. Applicants respectfully ask the Board of Appeals to review figure 1 and paragraph [0021].

Based on the figures and description in the specification, Applicants clearly had possession of the claimed subject matter of an access point as a single device. As has been repeatedly stated by both the Court of Customs and Patent Appeals and the Federal Circuit:

[A]ll that is required is that it [the applicant] *reasonably conveyed* to persons skilled in the art that, as of the filing date thereof, the inventor had *possession* of the subject matter later claimed by him. *Eiselstein*, 52 F.3d at 1039, 34 USPQ2d 1467, 1470 (emphasis added). *See also, Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158, 47 USPQ2d 1829, 1832 (Fed. Cir. 1998) (“To meet this requirement, the disclosure of the earlier application, the parent, must reasonably convey to one of skill in the art that the inventor possessed the later-claimed subject matter at the time the parent application was filed”).

Thus, to comply with written description requirement of 35 U.S.C. § 112, first paragraph, the specification and drawings must “reasonably convey” to persons having

ordinary skill in the art that as of the filing date that applicants had possessed the subject matter at issue. Clearly Applicants had possession of the claimed subject matter based on the drawing in figure 1 showing a single box for the access point, the definition of an access point provided in the specification, and repeated use of the access point as a single device.

For at least these reasons, Applicants respectfully ask the Board of Appeals to reverse the rejections of the Examiner.

Additionally, the Examiner rejects claim 17 as having insufficient antecedent basis for the term “access points being a single point.” This rejection is traversed.

Line 3 of claim 17 recites a plurality of access points (i.e., the claim recites plural access points). Then in line 4, the claim recites “each of said access points being a single device.” Line 3 provides the antecedent basis for the plural access points.

For at least these reasons, Applicants respectfully ask the Board of Appeals to reverse the rejection of the Examiner.

Claim Rejections: 35 USC § 103(a)

Claims 1-29 are rejected under 35 USC § 103(a) as being unpatentable over USPN 6,779,031 (Picher) in view of US application number 2004/025007 (Salo). These rejections are traversed.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. *See* M.P.E.P. § 2143. For at least the following reasons, Applicants assert that the rejection does not satisfy these criteria.

All Elements Not Taught or Suggested

Each of the independent claims recites one or more elements that are not taught or suggested in Picher in view of Salo. Applicants present claim 1 as an example.

Claim 1 recites an access point that has three elements: (1) a web server interface, (2) a usage collector, and (3) web cache software. The access point and these three elements are provided “in a single device” that links the guests to the Internet. Nowhere does the art of record teach or even suggest a single device that includes the three claim elements.

Figure 2 in Picher shows a plurality of separate devices that include a database 240, an event server 230, a node server 225, a database server 235, an RSVP node server 225, etc. Picher does not teach an access point that is a single device as claimed. Again, Picher teaches a plurality of various servers, databases, etc.

Salo teaches a user terminal that includes a cache. This user terminal is not even an access point. Again, claim 1 recites that the access point “links one or more guests to the Internet.” In Salo the user terminal is itself being linked to the internet; the user terminal is not providing the link for other guests or other user terminals.

Picher and Salo, alone or in combination, do not teach or suggest an access point that is a single device having the separate elements recited in the claims.

For at least these reasons, Applicants respectfully ask the Board of Appeals to reverse the rejections of the Examiner.

No Suggestion/Motivation to Modify/Combine References

For at least the following reasons, no suggestion or motivation exists to modify or combine Picher in view of Salo.

First, Applicant argues that no teaching or suggestion exists to make the combination because the references are directed to completely different inventions. Picher is directed to a server system having plural servers, routers, etc. that manage user sessions with Simple Network Management Protocol (SNMP) messages. By contrast, Salo is directed to a completely different structure and invention. Salo teaches a user terminal (not a server system). The user terminal in Salo stores in a cache frequently accessed user information to increase the speed of subsequent access to this information.

The Examiner must provide *objective evidence*, rather than subjective belief and unknown authority, of the requisite motivation or suggestion to combine or modify the cited references. *In re Lee*, 61 U.S.P.Q.2d. 1430 (Fed. Cir. 2002). Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Such teaching or suggestion does not exist.

Response to Examiner's Arguments on Combination

The Examiner argues that the combination of Picher and Salo is obvious because "Salo's teachings would have allowed Picher's method to provide the requested data from the ISP cache directly without having to connect to the internet directly and saving cost for accessing the internet" (see final OA at p. 4). Applicants respectfully disagree.

First, Picher and Salo would have to be greatly modified to arrive at the claimed invention. Picher is directed to a complex server system having multiple servers, routers, a database, etc. By stark contrast, Salo is directed to a user terminal (example, a personal computer). The servers in Picher are not designed to cache web pages for remote users and thus would have to be greatly modified for such a purpose.

Second, the differences between the claims and the applied references are great. By way of example, claim 1 recites that the access point is a single device. By contrast, Picher teaches a server system with various servers, routers, etc. Salo teaches a user terminal, not an access point as this term is defined in Applicants' specification and understood by one of ordinary skill in the art.

CONCLUSION

In view of the above, Applicants respectfully request the Board of Appeals to reverse the Examiner's rejection of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to Philip S. Lyren at Telephone No. 832-236-5529. In addition, all correspondence should continue to be directed to the following address:

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VIII. Claims Appendix

1. (previously presented) An access point, comprising:
 - a web server interface that couples one or more guests to the Internet;
 - a usage collector application that monitors usage of all of said guests; and
 - web cache software that caches web pages that are of interest to one or more guests in a local memory of the access point, wherein the access point is a single device that links the one or more guests to the Internet.
2. (previously presented) The access point of claim 1, wherein the web cache software predicts web pages that are of interest to a guest based on that guest's usage pattern, and caches those pages in local memory.
3. (original) The access point of claim 2, wherein the web cache software initiates a signal to the guest indicating that the cached pages are available for viewing.
4. (original) The access point of claim 1, wherein an web cache software caches web pages that have been accessed by multiple guests.
5. (original) The access point of claim 1, wherein each of said guests includes an identification mechanism which is used by said usage collector to compile usage information specific to each guest.
6. (original) The access point of claim 5, further comprising a local monitor that collects usage information from the usage collector application and provides further analysis of the usage information.
7. (original) The access point of claim 6, wherein the local monitor couples to a remote monitor to provide the further analysis of the usage information to the remote monitor.

8. (original) The access point of claim 7, further comprising a diagnostic application that launches when the usage collector detects an abnormality.

9. (original) The access point of claim 8, further comprising a management application that configures the local monitor to provide summary information to the remote monitor.

10. (original) The access point of claim 8 further comprising a management application that requests programs from the remote monitor based on the result of diagnostic application.

11. (previously presented) The access point of claim 10, wherein the web cache application, diagnostic application, and management application are dynamically modified based on guest usage.

12. (previously presented) A method of providing guests with Internet service, comprising:

- detecting at an access point a request for Internet access from a guest;
- monitoring at the access point usage patterns of the guest;
- predicting information that is of interest for the guest based on the guest's usage patterns; and

- locally caching in the access point the information that is of interest to the guest, prior to the time that the guest requests the information, the access point being a single device that links the guest to the Internet.

13. (original) The method of claim 12, further comprising transmitting information relating to the guest's usage patterns to a remote server, and analyzing the guest's usage patterns at the remote server using artificial intelligence software, and correlating the guest's usage patterns with previously detected usage patterns to predict future usage patterns of the guest.

14. (original) The method of claim 12, further comprising informing the guest of the locally cached information.

15. (original) The method of claim 12, wherein the act of predicting includes considering usage patterns of other guests.

16. (previously presented) The method of claim 12, wherein multiple guests request and receive Internet service at substantially the same time.

17. (previously presented) A system for remotely managing a plurality of Internet access points, comprising:

- a plurality of access points that provide Internet access for one or more guests, each of said access points being a single device and including a web server interface and a usage collector application, with the usage collector application detecting information relating to guest usage;

- a remote management server that couples to said plurality of access points via the Internet, said remote server including a remote monitor and a database;

- wherein the information relating to guest usage is transferred from the plurality of access points to the remote management server, and the remote management server analyzes the guest usage using software stored in said database to detect usage patterns, and the remote monitor downloads information to one or more access points to enhance the operation of the access point based on the detected usage pattern.

18. (original) The system of claim 17, wherein the usage collector application also detects information relating to system usage, and said information relating to system usage also is transferred to the remote management server for analysis.

19. (original) The system of claim 17, wherein at least one of the access points is a wireless access point that couples to the one or more guests via a wireless transmission medium.

20. (original) The system of claim 17, wherein the software stored in the database and used to detect usage patterns comprises artificial intelligence software.

21. (previously presented) The system of claim 20, wherein the artificial intelligence software predicts web pages that are of interest to guests based on usage patterns, and the access points include a web cache application for locally caching web pages predicted to be of interest to guests.

22. (original) The system of claim 20, wherein the artificial intelligence software detects improper activity based on usage patterns, and provides instructions to an access point to take corrective action to minimize the effect of the improper activity.

23. (original) The system of claim 17, wherein the access points include a diagnostic application that analyzes the access points to detect possible errors.

24. (previously presented) The system of claim 23, wherein the diagnostic software signals the remote monitor to download a program to an access point to assist in resolving a detected error condition.

25. (previously presented) An access point that permits multiple guests to obtain Internet access, comprising:

- means in said access point for interfacing said access point with the multiple guests;

- means in said access point for coupling the access point to the Internet;

- means in said access point for monitoring requests made by a guest to collect information on a guest's usage;

- means for selecting content that is of interest to the guest based on the guest's usage; and

means in said access point for locally storing content that is of interest to the user, wherein the access point is a device that links the multiple guests to the Internet.

26. (previously presented) The access point of claim 25, wherein the means for monitoring requests also monitors operational parameters related to said access point.

27. (previously presented) The access point of claim 25, further comprising means for diagnosing malfunctions of said access point.

28. (previously presented) The access point of claim 26, further comprising means for managing said access point.

29. (previously presented) The access point of claim 28, wherein the selecting means, diagnosing means, and managing means are dynamically modified based on the guest's usage detected by said monitoring means.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.